IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
MIDLAND/ODESSA DIVISION

VIRTAMOVE, CORP., Plaintiff, v. GOOGLE LLC, Defendant.	Case No. 7:24-cv-00033-DC-DTG **JURY TRIAL DEMANDED**

VIRTAMOVE, CORP.'S OPPOSITION TO
GOOGLE'S MOTION TO DISMISS AMENDED COMPLAINT

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I. INTRODUCTION

Google asserts that two patents providing computer-specific solutions to computer-specific problems are nevertheless invalid for claiming ineligible subject matter under 35 U.S.C. § 101. These patents claim specific advances in computer architecture, teaching an arrangement that allows for computer applications to share a common computer platform and enables the use of shared libraries for critical system elements. Rather than engage with the details of the advances in technology claimed by these patents, Google points to the existence of "processors" and other isolated elements, ignoring the other critical elements of the claims. Google's attempt to first remove all detail from the claims and then on that basis argue the claims are abstract is plainly contradicted by governing law. The Court should reject Google's challenges under *Alice* Step One. If the Court reaches *Alice* Step Two, it should resolve factual disputes over the inventiveness of the claimed invention in VirtaMove's favor and deny Google's motion at the pleading stage.

Google fails to articulate any basis to dismiss the allegations of direct infringement. Google has clear notice that Migrate to Containers is an accused product, running on Google's servers and/or is sold to customers. None of the allegations are so implausible to require dismissal. As to indirect infringement, Google relies on outdated law and should be denied. But if the Court is inclined to dismiss the indirect allegations, then it should do so with leave to take discovery and amend, as is the usual practice of this court. And as to pre-suit damages, Google's motion should be denied. The WayBack Machine link cited in Google's own motion is beyond plausible evidence that any products were properly marked before this lawsuit if any marking requirement applied.

II. BACKGROUND ON THE ASSERTED '814 AND '058 PATENTS

Titled "System for containerization of application sets," VirtaMove's U.S. Patent No. 7,519,814 (the "'814 Patent") provides unconventional solutions to longstanding problems unique to resource-sharing and security in computer systems. Prior approaches either placed distinct applications on numerous individual computer systems for security and isolation, or used virtual machines, which imposed storage and performance overhead. '814 Patent at 1:20-2:3. The

inventors of the '814 Patent instead taught a secure container system "to allow applications to more effectively share a common compute platform, and also allow applications to be easily moved between platforms, without the requirement for a separate and distinct operating system for each application." *Id.* at 1:65-2:3. In this novel and unconventional solution, applications are associated with "secure containers," where each application has its own copies of files and a unique identity, but is allowed to "contend for common resources and utilize different versions of system files." *Id.* at 7:4-15.

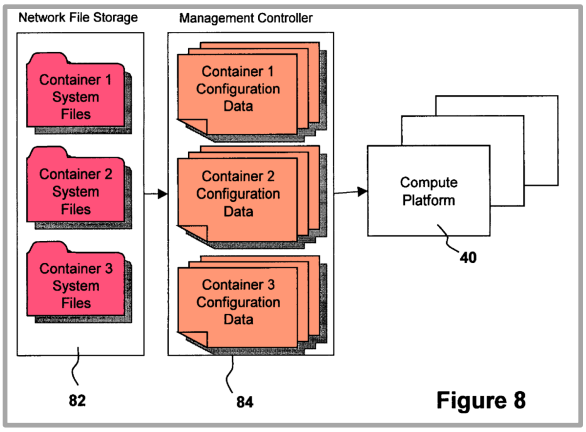


Figure 8

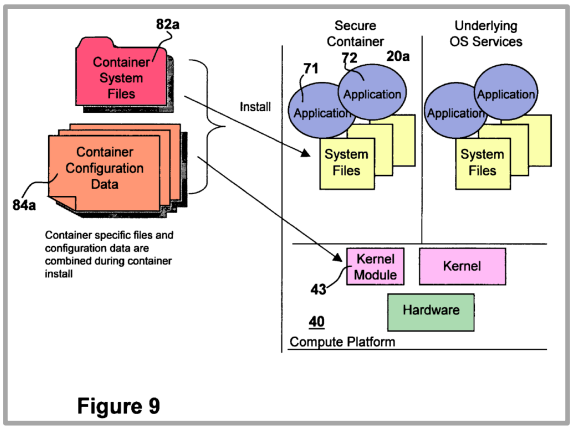


Figure 9

Moreover, the patent makes clear that it can involve combining and installing at least one application along with system files ***or a root file system*** to create ***a container file system***. *Id.* at 11: 35-40. And the voluminous figures and specification teachings of the patent supported detailed claims, including 291-word independent claim 1, reflected below:

> 1. In a system having a plurality of servers with operating systems that differ, operating in disparate computing environments, wherein each server includes a processor and an operating system including a kernel a set of associated local system files compatible with the processor, a method of providing at least some of the servers in the system with secure, executable, applications related to a service, wherein the applications are executed in a secure environment, wherein the applications each include an object executable by at least some [] operating systems for performing a task related to the service, the method comprising: storing in memory accessible to at least some of the servers a plurality of secure containers of application software, each container comprising one or more of the executable applications and a set of associated system files required to execute the one or more applications, for use with a local kernel residing permanently on one of the servers;

> wherein the set of associated system files are compatible with a local kernel of at least some of the plurality of different operating systems, the containers of application software excluding a kernel,
> wherein some or all of the associated system files within a container stored in memory are utilized in place of the associated local system files that remain resident on the server,
> wherein said associated system files utilized in place of the associated local system files are copies or modified copies of the associated local system files that remain resident on the server, and
> wherein the application software cannot be shared between the plurality of secure containers of application software, and
> wherein each of the containers has a unique root file system that is different from an operating system's root file system.

The second asserted patent—U.S. Patent No. 7,784,058 (the "'058 Patent")—focuses on problems in sharing critical system elements as user mode libraries. As the patent specification explains, allowing two applications to share the same critical system element poses security risks: for example, if one application requires the use of a range of network ports, a second application sharing the same networking element would be exposed to the security risk of similarly handling that range of ports. '058 Patent at 5:54-6:3. The '058 Patent instead teaches replicating certain critical system elements into the context of individual software applications using shared libraries. *Id.* at 5:21-25. It discloses providing an "additional service in the form of a CSE," where "[s]hared libraries are used as a mechanism whereby an application can utilize a CSE that is part of a library." *Id.* at 5:35-41. The patent explains that "each application has its own unique data space. This indivisible data space ensures that CSEs are unique to an application or more commonly to a set of applications ***associated with a container***[.]" *Id*., at 3:30-45. In this design, the CSEs are "replicated, and embodied in the context of an application," in contrast to prior art systems. *Id.* at 7:22-8:3.

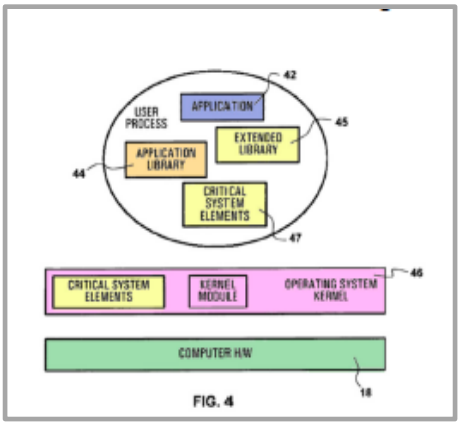


FIG. 4

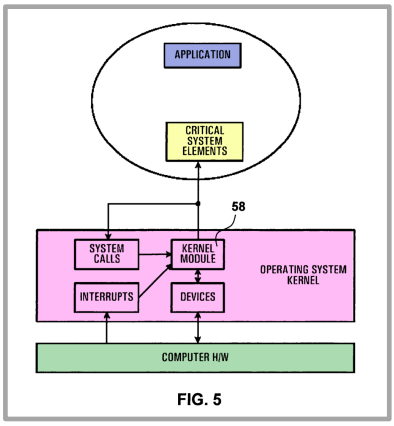


FIG. 5

By maintaining "platform specific aspects of the critical system element… in the operating system kernel," the shared library may "still make use of the operating system kernel to implement these platform specific functions." *Id.* at 8:41-45.

And the voluminous figures and specification teachings of the patent supported detailed claims, including 265-word independent claim 1, reflected below:

> 1. A computing system for executing a plurality of [] applications comprising:
>
> a) a processor;
>
> b) an operating system having an operating system kernel having OS critical system elements (OSCSEs) for running in kernel mode using said processor; and,
>
> c) a shared library having shared library critical system elements (SLCSEs) stored therein for use by the plurality of software applications in user mode and
>
> i) wherein some of the SLCSEs stored in the shared library are functional replicas of OSCSEs and are accessible to some of the plurality of software applications and when one of the SLCSEs is accessed by one or more of the plurality of software applications it forms a part of the one or more of the plurality of software applications,
>
> ii) wherein an instance of a SLCSE provided to at least a first of the plurality of software applications from the shared library is run in a context of said at least first of the plurality of software applications without being shared with other of the plurality of software applications and where at least a second of the plurality of software applications running under the operating system have use of a unique instance of a corresponding critical system element for performing same function, and

iii) wherein a SLCSE related to a predetermined function is provided to the first of the plurality of software applications for running a first instance of the SLCSE, and wherein a SLCSE for performing a same function is provided to the second of the plurality of [] applications for running a second [] SLCSE simultaneously.

III. LEGAL STANDARDS

A. Patent Eligibility

To determine patent eligibility under § 101, courts conduct a two-step analysis as articulated by the Supreme Court in *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). The court must determine "(1) whether the claim, as a whole, is 'directed to' patent-ineligible matter—here, an abstract idea—and (2) if so, whether the elements of the claim, considered individually or as an ordered combination 'transform the nature of the claim' into a patent-eligible application." *Ancora Techs., Inc. v. HTC Am., Inc.*, 908 F.3d 1343, 1347 (Fed. Cir. 2018).

"[T]he first step of the inquiry is a meaningful one," and the "directed to" inquiry requires consideration of the claims "in light of the specification" to determine if "their character as a whole is directed to excluded subject matter." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). If they are not, the claims are eligible under § 101. *Ancora*, 908 F.3d at 1349.

But if the claims are directed to an abstract idea, Step Two calls for the court to "consider the elements of each claim both individually and 'as an ordered combination' to determine whether [the claims contain] an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself.'" *Alice*, 573 U.S. at 217-18. Even where elements are conventional, the specific arrangement of conventional technologies can also form the inventive concept. *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016). "[W]hether a claim recites patent eligible subject matter is a question of law which may contain underlying facts." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

B. Infringement

Evaluating whether to grant a motion to dismiss under Rule 12(b)(6) is a "purely procedural question not pertaining to patent law." *McZeal v. Sprint Nextel Corp.*, 501 F.3d 1354, 1356 (Fed. Cir. 2007). Thus, Fifth Circuit law governs. *Id.* In the Fifth Circuit, "all well-pleaded facts" are accepted as true, they are viewed "in the light most favorable to the plaintiff," and "all reasonable inferences" are drawn in the plaintiff's favor. *Johnson v. BOKF Nat'l Ass'n*, 15 F.4th 356, 361 (5th Cir. 2021). A complaint must be "plausible on its face" with sufficient factual bases. *Ashcroft v. Iqbal*, 556 U.S. 544, 570 (2007). Specific facts are not required, as long as the statement gives the defendant "fair notice of what the . . . claim is and the grounds upon which it rests." *Erickson v. Pardus*, 551 U.S. 89, 93 (2007) (alteration in original) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 554, 555 (2007)). Discovery should generally proceed when "the relevant information is beyond the access of the plaintiff . . . unless the complaint recites no more than sheer speculation about the plaintiff's entitlement to relief." *Motiva Patents LLC v. Sony Corp.*, 408 F. Supp. 2d 819, 827 (E.D. Tex. 2019) (alteration in original). This is because a plaintiff "need not prove its case at the pleading stage." *Repairify, Inc. v. Keystone Auto. Indus., Inc.*, 610 F. Supp. 3d 897, 900–01 (W.D. Tex. 2022) (quoting *Nalco Co. v. Chem-Mod, LLC*, 883 F.3d 1337, 1350 (Fed. Cir. 2018)).

IV. THE '814 PATENT CLAIMS ARE ELIGIBLE UNDER 35 U.S.C. § 101

A. *Alice* Step One: Claim 1 is not directed to an abstract idea.

1. Based on the intrinsic record, Claim 1 is directed to a computer-specific solution to a computer -specific problem—and that renders them *not abstract* as a matter of law.

The Federal Circuit has made clear that the "directed to" analysis must consider "the claims as a whole" and account for and examine each invention's "*claimed advance*" in the art according to the record. *Ancora Techs.,* 908 F.3d at 1347-49. Skipping over this analysis is legal error, as the claimed advance "allow[s] for the improvement realized by the invention." *McRO, Inc. v. Bandai Namco Games Am. Inc*., 837 F.3d 1299, 1313 (Fed. Cir. 2016) .

When reviewing the intrinsic record here, it is clear that the claimed advance is:

storing a plurality of secure containers of application software; wherein associated

> system files utilized in place of the associated local system files are copies or modified copies of the associated local system files resident on the server, and each of the containers has a unique root file system.

Notably, both the specification and the file history confirm this point. For example, the specification states that conventional computer systems required distinct applications to be separated into individual computer systems in many circumstances, including based on the needs of an individual applications' operating system or else based on security requirements. *Id.* at 1:27-41. In turn, a greater number of individual computer machines were required to support the additional applications. *Id.* at 1:42-50. Moreover, virtual machine technology—in which a single physical computer included multiple separate and distinct operating systems corresponding to the multiple individual applications—represented one prior attempt to solve this problem. *Id.* at 1:51-2:3. But that technology imposed unwanted storage overhead as well as performance overhead. *Id.*

The inventors of the '814 Patent provided a different, unconventional technological solution to these and other shortcomings. In particular, the inventors recognized these computer-specific problems and conceived and taught a secure system "to allow applications to more effectively share a common compute platform, and also allow applications to be easily moved between platforms, without the requirement for a separate and distinct operating system for each application." *Id.* at 1:65-2:3. And the patent teaches that the applications are associated with "secure containers," where each application has its own copies of files and a unique identity, but is allowed to "contend for common resources and utilize different versions of system files." *Id.* at 7:4-15. The patent confirms that it can involve combining and installing at least one application along with system files or a root file system to create a container file system. *Id*. at 11: 35-40.

The file history only makes this clearer. As set forth in VirtaMove's FAC, the PTO examiner found that certain combination of elements highlighted below were the claimed advance:

> 14. Additionally, the USPTO examined the patented technology and concluded that the prior art "fails to anticipate, disclose, teach, or suggest alone, or in combination, at the time of the invention, the features as set forth of the claim . . . . Nowhere in the prior art is found collectively the *italicized* claim elements (i.e., the various aspects of applications software not being sharable between the plurality of secure (and isolated) containers of application software, and unique root file systems different from an operating system's root file system, so as to allow for different versions of the same operating running on the same system/server environment), at the ***time*** *of the invention*, serving to patently distinguish the prior art." Ex. 5 at 2–5. Thus, multiple aspects of the

This only confirms that the claimed advance covers precisely what VirtaMove says it does.

More to the point of Google's motion, the intrinsic record also confirms that the claimed inventions provided computer specific solutions to solve computer-specific problems with the prior art. *Uniloc*, 957 F.3d at 1309. This is *not* a case where the claims require a computer to perform an abstract idea untied to any computer specific problems and untethered to any problems specific to any technology area. This renders the claims *not abstract* as a matter of law.

Indeed, the Federal Circuit has repeatedly found analogous claims to be non-abstract and eligible. For instance, in *Enfish, LLC.*, The court explains that the claim is to be considered as a whole, and the "focus" or "character" of the claim is to be determined based on an evaluation of the specification. And doing so, the court held it is clear the claims are directed to a technological improvement to computer database technology—and, therefore, the claim is patent-eligible subject matter and there is no need to evaluate *Alice* Step Two. 822 F.3d at 1334. And in *Packet Intelligence LLC v. NetScout Systems, Inc.*, the Court found that the intrinsic record made clear "that the claimed invention presented a technological solution to a technological problem" and the claims were thus patent-eligible as a matter of law. This was because "the focus of the claims is a specific improvement in computer technology: a more granular, nuanced, and useful *classification of network traffic*." 965 F.3d 1299, 1309-10 (Fed. Cir. 2020). Likewise, in *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, the Court reversed a ruling that the challenged claims were abstract,

holding instead that the claims "are directed to a non-abstract improvement in an existing technological process (i.e., error checking in data transmissions)" in wireless devices. 942 F.3d 1143, 1150 (Fed. Cir. 2019).

Stripping away the character of the claims, Google argues that the claims are merely directed to "using containers with copies of system files for applications, so that those applications can be used in different operating environments." Mot. at 16. This strips away the claimed advance, contrary to what the specification and file history call for. Again, skipping over this analysis is legal error, as the claimed advance "allow[s] for the improvement realized by the invention." *McRO, Inc*., 837 F.3d at 1313. It therefore fails as a matter of law—and thus, so does the motion, because the Federal Circuit has "previously cautioned that courts must be careful to avoid oversimplifying the claims" by looking at them generally and failing to account for the specific requirements of the claims." *McRO, Inc. v. Bandai Namco Games Am.,* 837 F.3d 1299 (Fed. Cir. 2016) (reversing district court for accepting an oversimplification of the claims under Step One).

But, frankly, even under Google's articulation of what the claims are "directed to," it is still clear that the claims are *not abstract.* Instead, in light of the patent's intrinsic record, "using containers with copies of system files for applications, so that those applications can be used in different operating environments" also confirms the claims provide computer-specific solutions to computer-specific problems in the art. And this alone draws a clear distinction between the applicable Step-One cases on the one hand, and the cases cited by Google—including *RecogniCorp*, *Affinity Labs*, and the other cases cited by Google, on the other hand. This is *not* a case where the claims require a computer to perform an abstract idea untied to any computer specific problems and untethered to any problems specific to any technology area.

2. Google's other step-one arguments runs contrary to the factual record and controlling law.

Unable to articulate an abstract idea, Google argues that the claims recite only "highly generic terms" and do not provide any "specific means or method for improving technology." Mot, at 16. Not so. One look at the claims make clear that at least the specific requirements of:

(1) storing a plurality of secure containers of application software; (2) associated system files utilized in place of the associated local system files are copies or modified copies of the associated local system files resident on the server, and (3) each of the containers having a unique root file system, provide obviously specific means of performing the claimed method.

Moreover, Google's argument that the claims recite elements that are merely "generic," goes to *Alice* Step Two, not *Alice* Step One. But this Court need not get to Step Two if Google fails—as it does here—under Step One. At any rate, Google is incorrect that the claim elements are merely generic. While Google points to "processors" and other specific elements, it ignores the programming claimed for that hardware, as well as various other "wherein" requirements and other critical elements in the claim. This not only contradicts the very character of the claims, it also contradicts the law. Indeed, the "first step of the inquiry is a meaningful one," and the relevant inquiry requires consideration of the claims "in light of the specification" to determine if "their character as a whole is directed to excluded subject matter." *Enfish, LLC.*, 822 F.3d at 1334.

B. *Alice* Step Two: Google cannot show Claim 1 lacks inventive concepts; Instead, it relies on legally irrelevant arguments and ignores facts and allegations that must be accepted as true at this stage—and which are fatal to the Motion

While Step Two should not be reached here, Google's arguments at Step Two likewise fail because claim 1 recites an unconventional wireless device as of the time of the invention.

The Step Two inquiry requires considering *all* claim elements—and requires considering the entire claim *as an ordered combination*. *Cellspin Soft, Inc. v. Fitbit, Inc*., 927 F.3d 1306, 1307 (Fed. Cir. 2019). This is the first requirement that Google fails to meet. Instead of focusing on the ordered combination of elements, Google again isolates various hardware elements and ignores the programming required in the ordered combination. *See, e.g.,* Mot. at 17-20. Google's motion fails for this additional reason as well.

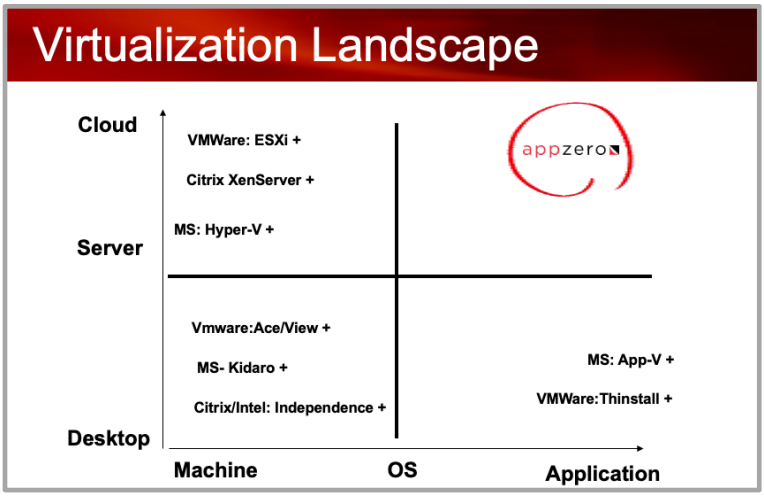
The Federal Circuit's decision in *BASCOM* is particularly instructive and demonstrates that claim 1 is inventive. In *BASCOM*, the Court analyzed a claim for a "content filtering system for filtering content retrieved from an Internet computer network by individual controlled access

network accounts" including "a local client computer" and "an ISP server," which, in isolation, were conventional. *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). Despite this, the Federal Circuit held that the ordered combination of elements included an inventive concept, which was described and claimed as "the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user. This design gives the filtering tool both the benefits of a filter on a local computer and the benefits of a filter on the ISP server." *Id.* at 1350. The court further held that "the claims ... do not preempt the use of the abstract idea of filtering content on the Internet or on generic computer components performing conventional activities." *Id.* at 1352. And *DDR Holdings* is also instructive. *DDR Holdings, LLC v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014). In that case, the Court found that the claims in this case "do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet." Instead, the claims are "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." Under any reasonable reading of the patent and related allegations, the same is true here.

At bottom, Google's suggestion that certain hardware elements are "conventional" does not satisfy Google's burden. Indeed, an invention's compatibility with conventional systems *does not* render it ineligible. *Uniloc USA, Inc. v. LG Elecs. USA, Inc*., 957 F.3d 1303, 1309 (Fed. Cir. 2020). If Google's argument were correct, then *Bascom*, *DDR Holdings* and other cases would have been decided differently—because the very same elements are recited in those cases.

Google also commits another fatal flaw: it never deals with the facts, evidence, and specific allegations in the intrinsic record and the FAC, all of which make clear the claims recite an ordered combination of elements that are unconventional. For instance, the '814 Patent clearly states that the inventors recognized computer-specific prior-art problems and conceived unconventional, computer-specific solutions for sharing and moving applications between computer platforms, using secure containers with their own root file system. '814 Patent at 1:65-2:3, 7:4-15, 11:35-40.

The closely related allegations in the FAC support this contention. For instance, the market also recognized the unconventionality of these containerization (and related) ideas discussed above. Indeed, after filing the provisional application in 2003 and the utility applications in 2004, VirtaMove's predecessor entity created a related solution for the marketplace. And the marketplace acknowledged just how unconventional these ideas were. As noted and alleged in detail in VirtaMove's complaint, independent business intelligence provider *Gartner* reported that AppZero's containerization solutions had no direct technological competitors in its quadrant of the market in "Cool Vendors in Cloud Computing" in April 2009, as depicted graphically below:



But the industry certainly caught up years later. Well over a decade later, Google's website, touts its product as a Cloud Server solution that provides containerization of the same sort:

https://cloud.google.com/migrate/containers/docs/getting-started. Thus, Google directly infringes by its making, using (e.g., running on Google's servers), offering for sale (e.g., offering Migrate to Containers), selling (e.g., selling Migrate to Containers), and/or importing. Google makes, uses, offers for sale, sells, and/or imports Migrate to Containers, as described in https://www.youtube.com/watch?v=Sbv-lzlGeIo, https://cloud.google.com/migrate/containers, https://cloud.google.com/migrate/containers/docs/getting-started. Migrate to Containers is a tool to containerize existing VM-based applications to run on Google Kubernetes Engine (GKE), GKE Autopilot clusters, GKE Enterprise, or Cloud Run. https://cloud.google.com/migrate/containers/docs/anthos-migrate-benefits.

Claim 1 is patent-eligible. At minimum, the facts here—which must be accepted as true and contradict Defendants' conventionality argument—raise factual disputes precluding dismissal. *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1126-28 (Fed. Cir. 2018).

C. Defendants also fail to show ineligibility for any other claim.

The other asserted claims of the patent provide unique additional computer-specific requirements, including detailed embodiments of the patent. *See, e.g.*, '081 Patent dependent claims. Google ignores these, fails to meet its burden under both *Alice* steps.

V. THE '058 PATENT CLAIMS ARE ALSO ELIGIBLE UNDER 35 U.S.C. § 101

A. *Alice* Step One: Claim 1 is not directed to an abstract idea; it is instead directed to a computer-specific solution to a computer-specific problem.

The '058 Patent's intrinsic record makes clear that the claims are directed to a computer-specific solution of computer-specific problems in the prior art. The state-of-the-art architecture at the time of filing of the patent application for managing shared system elements required by multiple applications are either isolated in the operating system kernel resulting in conflicts between applications or removed from the application context resulting in poor performance of the applications. Thus, the patent focuses on unconventional solutions to other longstanding challenges specific to computer systems; for instance, for sharing critical system elements as user mode libraries. As the patent specification explains, conventional systems placed individual applications on separate compute platforms to avoid the sharing critical elements. *Id.* at 1:34-36.

The '058 Patent discloses a novel solution to this problem by replicating certain critical system elements into the context of individual software applications using shared libraries. *Id.* at 5:21-25. But rather than simply copy a portion of the operating system into the application, the '058 Patent discloses providing an "additional service in the form of a CSE," where "[s]hared libraries are used as a mechanism whereby an application can utilize a CSE that is part of a library." *Id.* at 5:35-41. Moreover, piggybacking on the concept of containerization also taught and claimed in the '814 Patent, the '058 Patent states that "each application has its own unique data space. This

indivisible data space ensures that CSEs are unique to an application or more commonly to a set of applications associated with a container[.]" *Id*. at 3:30-45.

Based on the specification and the file history, it is clear that the claims are directed to:

> A computing system wherein some shared library critical system elements (SLCSEs) are functional replicas of operating system critical system elements (OSCSEs) and where at least one SLCSE related to a predetermined function is provided to a first application for a first instance of the SLCSE and a SCLCSE for performing the same function is provided to a second application for running a second instance of the SLCSE simultaneously.

The intrinsic record also confirms that the invention provides computer-specific solutions to computer-specific problems. Again, this renders the claims *not abstract* as a matter of law.

Stripping away the character of the claims, Google argues that the claims are merely directed to "replicating critical system elements for use with two or more software applications." Mot. at 8. This ignores the claimed advance, contrary to what the specification and file history call for. This is legal error, as the claimed advance "allow[s] for the improvement realized by the invention." *McRO, Inc*., 837 F.3d at 1313. But even under Google's articulation of what the claims are "directed to," it is still clear that the claims are *not abstract.* Instead, in light of the unrebutted and indisputable parts of the patent's intrinsic record, "replicating critical system elements for use with two or more software applications" also confirms the claims provide computer-specific solutions to computer-specific problems in the art. And this alone draws a clear distinction between the applicable Step-One cases on the one hand, and the cases cited by Google, on the other hand. This is *not* a case where the claims require a computer to perform an abstract idea untied to any computer specific problems and untethered to any problems specific to any technology area.

Also, as with the '814 Patent, Google again incorrectly argues that the claims recite only highly generic terms and do not provide any specific means or method for improving technology. One look at the claims confirm that argument ignores all the elements mentioned in the "directed to" summary above, let alone the many other elements that make up the "character" of the claims as a whole. After all, that is what we all must look at for this Step of the *Alice* inquiry. While

Google points to "processors" and other specific elements, it ignores the programming claimed for that hardware, as well as various other "wherein" requirements and other critical elements in the claim. This not only contradicts the very character of the claims; it also contradicts the law. Indeed, the "first step of the inquiry is a meaningful one," and the relevant inquiry requires consideration of the claims "in light of the specification" to determine if "their character as a whole is directed to excluded subject matter." *Enfish, LLC.*, 822 F.3d at 1334

B. *Alice* Step Two: Google cannot show Claim 1 lacks inventive concepts; Instead, it relies on legally irrelevant arguments and ignores facts and allegations that must be accepted as true at this stage—and which are fatal to the Motion.

While Step Two should not be reached here, Google's arguments at Step Two likewise fail because claim 1 recites an unconventional wireless device as of the time of the invention. Again, the Step Two inquiry requires considering *all* claim elements—and requires considering the entire claim *as an ordered combination*. *Cellspin Soft, Inc. v. Fitbit, Inc*., 927 F.3d 1306, 1307 (Fed. Cir. 2019). Instead of focusing on the ordered combination of elements, Google again isolates various hardware elements and ignores the programming required in the ordered combination. *See, e.g.,* Mot. at 14-15. Google's motion fails for this additional reason as well.

To be sure, Google's own later patents also confirm this point. Many years after the priority dates of the asserted patents, those patents make clear that containerization technology *was still described as non-generic*. For example, one Google patent, filed years later, states it is directed to "*containerized* environment may be used to efficiently run applications on a distributed or cloud computing system. U.S. Patent No. 10,965,752 (Ex. 1). Another much-later Google patent likewise states that its unconventional solution includes a "computer system may include a virtual machine *container*. . . [that] may include the hardware and software that provides the environment for execution of the virtual machines, and that provides other operations that support the virtual machines and the application programs operating therein." U.S. Patent No. 9,231,933 (Ex. 2).

These facts also defeat any motion at the pleadings stage, under *Alice* Step Two. This type of factual dispute must be reserved for the jury to resolve. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1370 (Fed. Cir. 2018).

C. Defendants also fail to show ineligibility for any other claim.

The other asserted claims of the patent provide unique additional computer-specific requirements, including detailed embodiments of the patent. *See, e.g.*, '058 Patent dependent claims. Google ignores these, fails to meet its burden under both *Alice* steps.

VI. INFRINGEMENT

A. Direct Infringement Is Well Pleaded

Google has not articulated any coherent reason for dismissing direct infringement. The complaint unambiguously alleges, that "Google directly infringes by its making, using (e.g., running on Google's servers), offering for sale (e.g., offering Migrate to Containers), selling (e.g., selling Migrate to Containers)." FAC ¶ 16. Each of these is a directly infringing activity. Google's Motion to Dismiss appears to concede the underlying facts. Google admits that Migrate to Containers is Google's tool. Dkt. 36 at 3. This tool is either run on Google servers (FAC ¶ 16) such that Google direct infringes, or it is sold to end users (*Id.*). Dkt. 36 at 4. Thus, direct infringement is well-pleaded.

The attached infringement charts provide specific allegations of infringement. Dkt. 27-2 (charting 15 pages of how Migrate to Containers infringements every element of claim 1 of the '814 Patent); Dkt. 27-4 (charting 25 pages of how Migrate to Containers infringes every element of claim 1 of the '058 Patent). Google's Motion to Dismiss cannot not identify any specific element is missing or implausible. Dkt. 36 at 4. The *only* element that Google previously identified as allegedly missing was that applications are not "running" or "executing" on Google's servers.[1] Dkt. 21 at 4 (identifying these elements in Google's first motion to dismiss). Google's pending Motion to Dismiss reiterates the "same point in its prior motion to dismiss." Dkt. 36 at 4. But the

[1] Claim 1 of the '814 patent does not include the words "running" or "executing." Claim 1 of the '058 patent is a system claim, not a method claim with steps of "running" or "executing."

First Amended Complaint now explicitly pleads that the tool is "running on Google's servers." Am. Comp. ¶ 16. By continuing to challenge this same point, Google's pending Motion to Dismiss should be denied because any dispute over the amended, plausible, well-pleaded fact that Google's Migrate to Containers runs on Google's servers must be resolved in VirtaMove's favor.

B. VirtaMove Pleads Pre-Suit Knowledge

The FAC pleads sufficient pre-suit knowledge of infringement to support induced and contributory infringement. These facts include: (1) Google met with representatives of VirtaMove in 2015, 2020, and 2021 for the purpose of partnering with VirtaMove, demoing the AppZero products, training Google how to use AppZero, and allowing Google to run and evaluate AppZero, (2) Google discussing the integration of AppZero into Google Cloud, such that VirtaMove shared its materials about how AppZero works, (3) Google would have learned from due diligence that AppZero was patented or chose to remain willfully blind during this process, and (4) VirtaMove's technology made their way into the infringing Google products. FAC ¶ 10.

Google raises, at most, a factual dispute about whether it learned that AppZero was patented during its due diligence—a dispute that must be resolved in VirtaMove's favor at the pleading stage. Such due diligence, including the investigation of patents, is standard procedure when discussing tech partnerships. *See* Exhibit 3 (reporting that IBM conducted "due diligence" under similar circumstances). Thus, Google would have either known the technology that it stole was patented from due diligence, or Google chose to skip the customary type of due diligence that IBM performed so that Google could remain willfully blind. These facts allow the Court or jury to infer that Google knew that Google's later-developed product using VirtaMove's technology infringes VirtaMove's patents.

The *Kirsch* case has a distinguished fact pattern because it does not involve the pattern of one company expressing interest in another company to induce disclosure of patented technology as part of a business deal, then conducting customary due diligence to know the product was patented (or remaining willfully blind by avoiding the customary due diligence), and then taking

that technology. *Kirsch Rsch. & Dev., LLC v. Tarco Specialty Prod., Inc.*, No. 6:20-CV-00318-ADA, 2021 WL 4555802, at *2 (W.D. Tex. Oct. 4, 2021).

C. Induced Infringement is Well Pleaded

Defendants argue for dismissal of induced infringement for two reasons: (1) that Google did not know that the alleged acts infringe, and (2) Google did not know that its promotion of products induces others to infringe. Both of these arguments stem from Google's dispute of the underlying facts for the reasons discussed in the preceding section—a type of factual dispute that is improper at the pleading stage. The facts make it plausible to infer that Google pretended to be interested in partnering with VirtaMove, inducing the VirtaMove to share its technology, and then kicking VirtaMove to the curb. During this process, either Google knew from due diligence that the technology it was taking was patented, or Google was willfully blind. Then, "VirtaMove's technology from its demos and disclosures appears to have made their way into the Accused Products of Google." FAC ¶ 10. It is plausible to infer that Google would have known that it induces infringement when its customers use the technology that was taken from VirtaMove.

As to direct infringement by customers, the pleading specifically alleges that Google's "customers [] infringe the '814[/'058] patent through the customers' normal and customary use of the Accused Products." FAC ¶¶ 18, 30. As supported in the claim charts, this is sufficient.

Google's final argument, that the complaint lacks allegations of "culpable conduct," fails because it is specifically pleaded that Google "continues to actively encourage and instruct their customers and end users (for example, through user manuals and online instruction materials on its website) to use the Accused Products in ways that directly infringe." FAC ¶¶ 18, 30. This is sufficient to infer culpable conduct, and similar language has been ruled sufficient to infer specific intent. *See, e.g.*, *BillJCo, LLC v. Apple Inc.*, 583 F. Supp. 3d 769, 780 (W.D. Tex. 2022) ("Apple takes specific steps to actively induce others—such as, for example customers, application developers, and third-party manufacturers—to access, use, and develop programs and applications for the Accused Instrumentalities and intentionally instructs infringing use through training videos,

demonstrations, brochures, installation and user guides . . . .”). Given the similar allegations here, the motion to dismiss post-suit induced infringement should be denied.

D. Contributory Infringement is Well Pleaded

The FAC sufficiently pleads the elements of contributory infringement. Google’s Motion to Dismiss asks the Court to look only at two paragraphs of the FAC and to ignore the rest of the FAC and to ignore the attached charts. Dkt. 36 at 6. But Court should consider the entire pleading.

It is alleged that Google has servers for running the accused product Migrate to Containers. FAC ¶ 28. Claim 1 of the ’814 Patent begins, “In a system having a plurality of servers” configured in a certain way, a “method comprising” various steps. Dkt. 27-1 at 17:30–61. Under one alternative theory, Google contributes to infringement by providing these specially configured servers so that Google’s customers can run Migrate to Containers on them, causing infringement of the rest of the claim. FAC ¶ 28; Dkt. 27-2 (generally). Under another alternative theory, Google similarly provides the specially configured computing system of claim 1 of the ’058 Patent to Google’s customers “for executing a plurality of software applications” by those customers. Dkt. 27-3 at 10:51–11:14. Such servers, once specially configured as recited in the asserted patents, are no longer staple articles, nor are they suitable for noninfringing uses.

E. Post-Suit Knowledge Prevents Dismissal of Indirect Infringement

Even if the Court finds a lack of pre-suit knowledge, the Court should not dismiss post-suit indirect infringement allegations (induced and contributory infringement) because Google has not challenged post-suit knowledge or post-suit indirect infringement. *See* Dkt. 36 at 7 (challenging only pre-suit allegations). Indeed, the complaint puts Google on notice of infringement post-suit.

The Court now distinguishes between pre-suit and post-suit indirect infringement. *BillJCo, LLC v. Apple Inc.*, 583 F. Supp. 3d 769, 777–778, 780 (W.D. Tex. 2022) (granting motion to dismiss pre-suit indirect infringement, but denying motion to dismiss post-suit indirect infringement). In 2022, this Court specifically rejected the proposition that pre-suit knowledge is a requirement for post-suit indirect infringement. *Id.* at 779. Google’s 2020 cases like

Castlemorton and *Parus* are outdated. *Castlemorton Wireless, LLC v. Bose Corp.*, No. 6:20-CV-00029-ADA, 2020 WL 6578418, at *5 (W.D. Tex. July 22, 2020); *Parus Holdings v. Apple Inc.*, No. 6:19-cv-00432-ADA, Dkt. 28, 35 (W.D. Tex. Feb. 20, 2020). After *BillJCo*, pre-suit knowledge of infringement is still needed for pre-suit indirect infringement, but post-suit knowledge (e.g., via the complaint) is sufficient for post-suit indirect infringement.

VII. PRESUIT DAMAGES

VirtaMove properly pleaded that it is "entitled to past damages under § 271." FAC ¶¶ 22, 34. VirtaMove even linked to a website showing an example of pre-suit compliance with the marking statute. *Id.* This is more than sufficient to meet the pleading requirement. *CPC Pat. Techs. Pty Ltd. v. Apple Inc.*, No. 6:21-CV-00165-ADA, 2022 WL 118955, at *2 (W.D. Tex. Jan. 12, 2022). ("At the motion to dismiss stage, '[a] claim for past damages requires pleading compliance with the marking statute.'"). In that case, the Court denied the motion to dismiss past damages because the complaint alleged that Plaintiff provided pre-suit notice. *Id.* at *4. Notably, there is no requirement to *prove* compliance with marking at the pleading stage. *See Arctic Cat Inc. v. Bombardier Recreational Prod. Inc.*, 876 F.3d 1350, 1365–66 (Fed. Cir. 2017). Plaintiff's allegations are plainly sufficient to meet its *pleading* burden.

Alternatively, Google's motion should be denied because there is no marking requirement for asserted method claim 1 of the '814 Patent. It is "settled in the case law that the notice requirement of this statute does not apply where the patent is directed to a process or method." *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1083 (Fed. Cir. 1983).

VIII. CONCLUSION

The motion should be denied in its entirety. If the Court is inclined to grant any part of it, VirtaMove should be given leave to amend its pleadings. *Aatrix*, 882 F.3d at 1126. As to indirect infringement, if the Court is inclined to grant the motion, the Court should instead grant Plaintiff leave to amend its complaint up to three months into fact discovery, as is the usual practice in the Western District of Texas. *See BillJCo*, 583 F. Supp. 3d at 782.

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Respectfully submitted,

By: *Reza Mirzaie*

Reza Mirzaie (CA SBN 246953)
rmirzaie@raklaw.com
Marc A. Fenster (CA SBN 181067)
mfenster@raklaw.com
Neil A. Rubin (CA SBN 250761)
nrubin@raklaw.com
James A. Milkey (CA SBN 281283)
jmilkey@raklaw.com
Amy E. Hayden (CA SBN 287026)
ahayden@raklaw.com
Jacob Buczko (CA SBN 269408)
jbuczko@raklaw.com
James Tsuei (CA SBN 285530)
jtsuei@raklaw.com
Christian W. Conkle (CA SBN 306374)
cconkle@raklaw.com
Jonathan Ma (CA SBN 312773)
jma@raklaw.com
Daniel B. Kolko (CA SBN 341680)
dkolko@raklaw.com
RUSS AUGUST & KABAT
12424 Wilshire Boulevard, 12th Floor
Los Angeles, CA 90025
Telephone: (310) 826-7474

Qi (Peter) Tong (TX SBN 24119042)
RUSS AUGUST & KABAT
4925 Greenville Ave., Suite 200
Dallas, TX 75206
Telephone: (310) 826-7474

Attorneys for Plaintiff VirtaMove, Corp.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this document is being served via EFS on July 2, 2024 to all counsel of record.

/s/ Peter Tong
Peter Tong